

In the Claims

Please substitute the following amended claims for those currently pending:

1. (currently amended) A device for applying a pulsating pressure to a local region of the body, the device comprising a pressure chamber in to which a limb of the body can be placed to seal it from external conditions, whereby in use the limb can be immersed in a liquid contained in the pressure chamber such that the liquid surrounds and is in contact with the limb wherein an element is provided to generate pulses of negative pressure within the chamber that can be transmitted to the limb directly via the liquid, the element being adapted to generate negative pressure for between 5[1] and 15[20] seconds and to release negative pressure for between 5[2] and 10[15] seconds.

2. (original) The device as claimed in claim 1, wherein the pressure chamber comprises an elongate housing having an opening for receiving the limb and a seal arranged around the opening for sealing against the limb.

3. (original) The device as claimed in claim 2, wherein the elongate housing is a cylindrical or box-shaped housing.

4. (currently amended) The device as claimed in claim 2, wherein an inlet and outlet are provided in the housing for introducing and discharging the liquid into and out of the chamber, the inlet and outlet being in communication with each other via a fluid path that is defined by internal walls of the chamber and the surface of the limb once it has been introduced into the chamber, such that in use liquid flows from the inlet into the chamber, circulates around and in contact with the surface of the limb and is then discharged via the outlet.

5. (cancelled)

6. (original) The device as claimed in claim 4, wherein a liquid flow transmission means is connected to the pressure chamber via the inlet and outlet to generate a flow of liquid which is circulated within the chamber and around the limb.

7-8. (cancelled)

9. (currently amended) The device as claimed in claim 1, wherein the liquid is circulated through a heat exchanger unit before it enters the pressure chamber to control the temperature of the liquid, the heat exchanger unit comprising a plurality of heat exchanger tubes housed within a water bath.

10-39. (cancelled)

40. (currently amended) The method as claimed in claim 50[39], wherein the liquid is maintained at a temperature approximately between 20°C and 25°C of less than 10°C whilst the pulsating pressure is applied to the limb.

41. (original) The method as claimed in claim 48[38], wherein the liquid is maintained at a temperature greater than approximately between 43.5°C and 45°C whilst the pulsating pressure is applied to the limb.

42-47. (cancelled)

48. (currently amended) A method of treating hypothermia in a human body by applying a pulsating pressure to a local region of that body comprising the steps of:
providing a pressure chamber;
introducing a limb in to the pressure[,] chamber such that it is sealed from external conditions;
filling or partially filling the pressure chamber with a liquid to;

immersing[e] the limb in the liquid so that it is substantially surrounded by and in contact with the liquid;

circulating the liquid via a heat exchanger unit to heat the liquid to a temperature of 40°C or above; and

generating pulses of negative pressure within the chamber of between -20 mmHg and -80 mmHg (-2.7 kPa and -10.7 kPa), each pulse of negative pressure being generated for between 5[1] and 15[20] seconds and released for an interval of between 5[2] and 10[15] seconds the pulses of negative pressure and thermal energy in the liquid being transmitted simultaneously to the limb of the patient via the direct contact with the liquid.

49. (original) The method of treating hypothermia in a human body as claimed in claim 48, wherein the negative pressure is generated for 10 seconds and then released for 7 seconds.

50. (currently amended) A method of treating hyperthermia in a human body by applying a pulsating pressure to a local region of that body comprising the steps of:

providing a pressure chamber;

introducing a limb in to the pressure[,] chamber such that it is sealed from external conditions;

filling or partially filling the pressure chamber with a liquid to;

immersing[e] the limb in the liquid so that it is substantially surrounded by and in contact with the liquid;

circulating the liquid via a heat exchanger unit to cool the liquid to a temperature of 30°C or less; and

generating pulses of negative pressure within the chamber of between -20 mmHg and -80 mmHg (-2.7 kPa and -10.7 kPa), each pulse of negative pressure being generated for between 5[1] and 15[20] seconds and released for an interval of between 5[2] and 10[15] seconds the pulses of negative pressure and thermal energy in the liquid

being transmitted simultaneously to the limb of the patient via the direct contact with the liquid.

51. (original) The method of treating hyperthermia in a human body as claimed in claim 50, wherein the negative pressure is generated for 10 seconds and then released for 7 seconds.

52-69. (cancelled)

70. (previously presented) The device as claimed in claim 1, wherein the element is adapted to release negative pressure for 7 seconds.

71. (cancelled)

72. (previously presented) The device as claimed in claim 1, wherein the element is adapted to generate negative pressure for 10 seconds.

73-75. (cancelled)

76. (previously presented) The device as claimed in claim 1, wherein the element is adapted to generate negative pressure for 10 seconds and to release negative pressure for 7 seconds.

77. (previously presented) The device as claimed in claim 1, wherein the liquid is water.

78-82. (cancelled)

83. (new) The device as claimed in claim 1, wherein the device is adapted to maintain the liquid contained in the pressure chamber approximately between 20°C and 25°C.

84. (new) The device as claimed in claim 1, wherein the device is adapted to maintain the liquid contained in the pressure chamber approximately between 43.5°C and 45°C.

85. (new) The method of treating hypothermia in a human body as claimed in claim 48, wherein introducing the limb to the pressure chamber occurs before filling or partially filling the pressure chamber with liquid.

86. (new) The method of treating hyperthermia in a human body as claimed in claim 50, wherein introducing the limb to the pressure chamber occurs before filling or partially filling the pressure chamber with liquid.

87. (new) The method of treating hypothermia in a human body as claimed in claim 48, wherein each pulse of negative pressure is generated for about 10 seconds.

88. (new) The method of treating hypothermia in a human body as claimed in claim 48, wherein each pulse of negative pressure is released for about 7 seconds.

89. (new) The method of treating hyperthermia in a human body as claimed in claim 50, wherein each pulse of negative pressure is generated for about 10 seconds.

90. (new) The method of treating hyperthermia in a human body as claimed in claim 50, wherein each pulse of negative pressure is released for about 7 seconds.